

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7, drawn to a ceramic packing element.

Group II, claim(s) 8, drawn to a regenerative thermal oxidizer.

1. The inventions listed as Groups I & II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature which is referred to Annex B of Appendix A1 of the MPEP (Administrative Instructions under the PCT, "Unity of Invention"). The express "special technical features" is defined as meaning those technical features that define a contribution which each of the inventions, considered as a whole, makes over the prior art." (Rule 13.2).

Unity exists only when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding claimed special technical features.

In this case, the technical feature shared by each invention is the ceramic monolith.

2. The question of unity of invention has been reconsidered retroactively by the examiner in view of the search performed; a review of US5851636 (Lang et al.) makes clear that the inventions of the groups I&II lack the same or corresponding special technical feature because the cited reference(s) appear to demonstrate that the claimed technical feature does not define a contribution which each of the inventions, considered as a whole, makes over the prior art. Therefore, the common feature fails to

become a special technical feature. Accordingly, the prior art of the record supports restriction of the claimed subject matter in to the groups as mentioned immediately above..

3. During a telephone conversation with George W. Moxon on 09/11/08 a provisional election was made to prosecute the invention of II, claim 8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-7 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klobucar (US5352115).

Klobucar discloses a regenerative thermal oxidizer comprising a combustion chamber including a burner (Fig 1, 24), and further comprising at least two heat exchangers, two heat transfer columns. Passages connecting the heat exchanger and the combustion chamber are present. One of the heat exchangers received a cool gas to be cleaned; the inlet valve is open, and the outlet valve is close. The gas passes through the combustion chamber. Another heat exchanger receives a hot cleaned gas from the combustion chamber; the inlet valve is close, while the outlet valve is open.

(Column 4, lines 60-68, Column 5, lines 1-44). Each and every element of part A-C is covered by the reference.

Klobucar further discloses a heat transfer column is formed of a heat resistant, heat retaining material having a plurality of spaced axial gas flow passages. The heat transfer column preferably has a substantially constant cross-sectional area; the pressure drop across the heat transfer column is less than five inches of water with a superficial flow greater than 100 feet per minute (Column 3, lines 34-58).

Although Klobucar does not explicitly teach the cross area with straight sides and significantly rounded corners, it would have been obvious to one of ordinary skill in the art at the time the invention was made to conclude that the cross section area could be a square with pointed corners or a square with curvature corners because of Klobucars suggestion where a cross area with a maximum dimension (typically a width or diameter) is less than one half inch (Column3, lines -41). Otherwise, it still would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shape of the cross section or adjust the radius of the rounded corners in order to increase options to meet the industry's needs. One would have been motivated to do so to increase industrial applicability.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REBECCA LEE whose telephone number is (571)270-5856. The examiner can normally be reached on Monday-Friday 8:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on 5712720579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R.L.

/Vickie Kim/
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